



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,891	03/31/2004	Tadashi Saito	W1878.0193	4980
32172	7590	06/08/2007	EXAMINER	
DICKSTEIN SHAPIRO LLP			AGGARWAL, YOGESH K	
1177 AVENUE OF THE AMERICAS (6TH AVENUE)				
NEW YORK, NY 10036-2714			ART UNIT	PAPER NUMBER
			2622	
			MAIL DATE	DELIVERY MODE
			06/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/812,891	SAITO, TADASHI
	<b>Examiner</b>	<b>Art Unit</b>
	Yogesh K. Aggarwal	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 March 2004 and 22 December 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/16/2006, 03/31/2004</u> .                                  | 6) <input type="checkbox"/> Other: ____.                          |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Su (US Patent # 6,686,973).

[Claim 1]

Applicant's admitted prior art teaches a material presentation device (figure 1, device 100), comprising:

a materials stage (101) for placing a material that is an object of image capture

(Paragraph 6);

an imaging means (camera 103) composed of an imaging element (CCD) and optics as a single unit for picking up an image of said material that is placed on said materials stage and supplying a picture signal as output (Paragraphs 6 and 10);

a signal output means for supplying said picture signal to an outside (Paragraph 10 teaches outputting data to a display that is electrically connected to the device 100);

a securing member (arm 102) for holding said imaging means (camera 103) in a freely movable state for picking up the image of said material at an angle from a position other than directly above said materials stage (Paragraph 7).

Applicant's admitted prior art fails to teach a means for using a displacement amount detector that detects an amount of displacement of said securing member, and based on detection

results of said displacement amount detector, correcting a distortion of the image that has been captured by said imaging means.

However Su teaches a materials presentation device (figures 1a, 1b and 3) that uses a detector (40, figure 3, displacement amount detector) that detects an amount of displacement (angle) of the projector 10 with the disposition surface 20 (securing member) and based on detection results of said displacement amount detector, correcting a distortion of the image that has been captured by said imaging means (col. 3 line 1-col. 5 line 8, figures 1-3).

Therefore taking the combined teachings of Applicant's admitted prior art and Su, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have a displacement amount detector that detects an amount of displacement of said securing member, and based on detection results of said displacement amount detector, correcting a distortion of the image that has been captured by said imaging means as taught in Su to be implemented into the applicant's admitted prior art so that the user does not have to adjust the position of the projector manually and instead, the disposition parameters can be automatically detected by the detector thereby the deviation between the real time disposition parameters and the standard reference values with which the projector is well aligned, the projected image can be corrected thereby making the whole process easier, automatic and implemented in real-time (col. 5 lines 61-col. 6 line 6).

[Claim 2]

Applicant's admitted prior art in view of Su teach all the limitations of claim 1. Furthermore, Su teaches an further an image data processor (control section 430) between said imaging means (analog video signal in figure 3 shown as an input of 60) and said signal output means (70B) for

processing an electrical signal (figure 3) that is obtained from said displacement amount detector (40 and 50) and correcting the distortion of a captured image that is produced according to the amount of displacement of said securing member (col. 3 line 1-col. 5 line 8, figures 1-3).

[Claim 3]

Applicant's admitted prior art in view of Su teach all the limitations of claim 2. Furthermore, Applicant's admitted prior art teaches a materials stage (101) for placing a material that is an object of image capture (Paragraph 6) and an imaging means (camera 103) composed of an imaging element (CCD) and optics as a single unit for picking up an image of said material that is placed on said materials stage and supplying a picture signal as output (Paragraphs 6 and 10). Su teaches a distortion correction processor (80) that corrects distortion with a function for using distortion correction parameters to correct optical distortion of a captured image (col. 4 line 46-col. 5 line 5, figures 1-3) and a storage unit (look up table 90) for storing distortion correction parameters in correspondence with output values of said displacement amount detector (See table 1-3 at col. 4 lines 11-61); and an arithmetic processor (contained in the control unit 80) for reading from said storage unit distortion correction parameters that correspond to output values of said displacement amount detector (col. 5 lines 48-60) and resetting said distortion correction parameters of said distortion correction processor (col. 4 lines 55-61 teach that the correction values are not fixed or constant at all time and are corrected and obtained by disposing the projector on the horizontal, and then stored in the memory as a look up table).

[Claims 4 and 5]

Applicant's admitted prior art in view of Su teach all the limitations of claims 2 and 3. Furthermore, Su would have a power switch to turn on or off the apparatus of figure 3 or some

Art Unit: 2622

mechanism to turn the apparatus on or off which would also turn the distortion correction processing on or off.

[Claims 6-10]

Applicant's admitted prior art in view of Su teach all the limitations of claims 1-5. Furthermore, Applicant's admitted prior art teaches a light source 104 placed adjacent to the camera apparatus 103 (Paragraph 6, figure 1).

[Claims 11-20]

Applicant's admitted prior art in view of Su teach all the limitations of claims 1-10. Furthermore, Applicant's admitted prior art teaches a display for outputting a signal as an image (Paragraph 10).

*Conclusion*

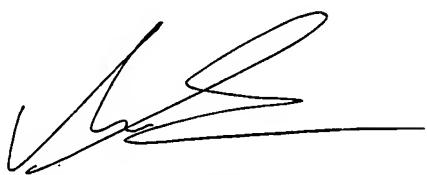
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571)-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YKA  
May 28, 2007



VIVEK SRIVASTAVA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600